5

UNITED STATES PATENT AND TRADEMARK OFFICE

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10/632,447	07/31/2003	Sujoy Basu	200310041-1	2864

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EXAMINER
BAYARD, DJENANE M

ART UNIT	PAPER NUMBER
2141	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/07/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

PTOL-90A (Rev. 10/06)

	Application No.	Applicant(s)
Office Action Summary	10/632,447	BASU ET AL.
	Examiner	Art Unit	
	Djenane M. Bayard	2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 July 2003*.

2a)☐ This action is **FINAL.** 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-6, 8-23 and 25-26* is/are rejected.

7)☒ Claim(s) *7 and 24* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2.   This application currently names joint inventors. In considering patentability of the

claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various

claims was commonly owned at the time any inventions covered therein were made absent any

evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out

the inventor and invention dates of each claim that was not commonly owned at the time a later

invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c)

and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3.   Claims 1-5, 8-15, 18-22 and 25-26 are rejected under 35 U.S.C. 103(a) as being

unpatentable over U.S. Patent Application No. 2005/0027864 to Bozak et al in view of U.S.

Patent No. 6,424992 to Devarakonda et al.

a.   As per claims 1 and 18, Bozak et al teaches a resource allocation method comprising:

receiving a request for an interactive session from a user (See page 1, paragraph [0006],

responding to a request for computational resources), wherein said request comprises a resource

requirement profile for defining a virtualized computing resource that supports said interactive

session (See page 3, paragraph [0034] and page 4, paragraph [0037]));   However, Bozak et al

fails to teach selecting a computing resource having an affinity to said user from a plurality of

computing resources available to said user wherein said computing resource comprises said

virtualized computing resource and requires the least amount of initialization to support said

interactive session ; and assigning said computing resource to said user to support said

interactive session.

Devarakonda et al teaches selecting a computing resource having an affinity to said user

from a plurality of computing resources available to said user (See col. 7, lines 9-20) wherein

said computing resource comprises said virtualized computing resource and requires the least

amount of initialization to support said interactive session (See col. 4, lines 10-13); and assigning

said computing resource to said user to support said interactive session (See col. 8, lines 53-57).

It would have been obvious to one with ordinary skill in the art at the time the invention

was made to incorporate the teaching of Devarakonda et al in the claimed invention of Bozak et

al in al in order to keep the overhead for affinity routing and load balancing small (See col. 4,

lines 10-13).

b.   As per claim 10, Bozak et al teaches a plurality of computing resources that are

dynamically allocated to users according to demand and resource requirement profile; an

information services module for maintaining resource profiles of each of said plurality of

computing resources (See page 4, paragraph [0037]); a file archival for providing a backup

storage system for files associated with said plurality of computing resources (See page 4,

paragraph [0040]); and a manager for assigning a selected computing resource from said

plurality of computing resources to a user requesting an interactive session, wherein said selected

computing resource has an affinity for said user (See page 3, paragraph [0034]). However,

Bozak et al fails to teach wherein said selected computing resource has an affinity for said user.

Devarakonda et al teaches wherein said selected computing resource has an affinity for

said user (See col. 9-20).

It would have been obvious to one with ordinary skill in the art at the time the invention

was made to incorporate the teaching of Devarakonda et al in the claimed invention of Bozak et

al in order to keep the overhead for affinity routing and load balancing small (See col. 4, lines

10-13).

c.   As per claims 2 and 19, Bozak et al in view of Devarakonda et al teaches the claimed

invention as described above. Furthermore, Bozak et al teaches wherein said selecting a selected

computing resource further comprises: selecting said computing resource from said plurality of

computing resources as having files in memory that will be used in said interactive session (See

page 2, paragraph [0027], *data retrieval tasks for the application).*

d.   As per claims 4 and 21, Bozak et al in view of Devarakonda et al teaches the claimed

invention as described above. Furthermore, Bozak et al teaches selecting said computing

resource from said plurality of computing resources that best satisfies said resource requirement

profile if said user is not a frequent user (See page 4, paragraph [0037]).

e.   As per claims 5 and 22, Bozak et al in view of Devarakonda et al teaches the claimed

invention as described above. Furthermore, Bozak et al teaches pinning said selected computing

resource to said user after an end to said interactive session (See page 1, paragraph [0010]).

f.   As per claims 8 and 25, Bozak et al in view of Devarakonda et al teaches the claimed

invention as described above. Furthermore, Bozak et al teaches updating files assigned to said

user in said selected computing resource for use in said interactive session (See page

g.   As per claims 9, 11 and 26, Bozak et al in view of Devarakonda et al teaches the claimed

invention as described above. Furthermore, Bozak et al teaches wherein said pluralities of

resources are configured in a grid computing environment (See page 1, paragraph [0005]).

h.   As per claim 12, Bozak et al in view of Devarakonda et al teaches the claimed invention

as described above. Furthermore, Bozak et al teaches wherein said manager further comprises:

an affinity module for selecting said selected computing resource to said user based on said

affinity for said user (See page 4, paragraph [0037]).

i.   As per claim 13, Bozak et al in view of Devarakonda et al teaches the claimed invention

as described above. Furthermore, Bozak et al teaches wherein said affinity defines said selected

computing resource as requiring the least amount of initialization to support said interactive

session (See page 4, paragraph [0037]).

j.   As per claim 15, Bozak et al teaches the claimed invention as described above. However, Bozak et al fails to teach wherein said manager selects a computing resource as said selected computing resource from said plurality of computing resources that undergoes the least amount of initialization before being able to support said interactive session.

Devarakonda et al teaches wherein said manager selects a computing resource as said selected computing resource from said plurality of computing resources that undergoes the least amount of initialization before being able to support said interactive session (See col. 4, lines 10-13).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Devarakonda et al in the claimed invention of Bozak et al in order to keep the overhead for affinity routing and load balancing small (See col. 4, lines 10-13).

k.   As per claims 3 and 20, Bozak et al teaches the claimed invention as described above. However, Bozak et al fails to explicitly teach wherein said selecting a selected computing resource further comprises: selecting an available computing resource previously assigned to said user and reserved for said user as said computing resource if said user is a frequent user; and selecting another computing resource as said computing resource that best satisfies said resource requirement profile if said available computing resource previously assigned to said user is not available.

Devarakonda et al teaches wherein said selecting a selected computing resource further comprises: selecting an available computing resource previously assigned to said user and

reserved for said user as said computing resource if said user is a frequent user (See col. 7, lines 9-20 and col. 8, lines 53-57); and selecting another computing resource as said computing resource that best satisfies said resource requirement profile if said available computing resource previously assigned to said user is not available (See col. 7, lines 39-45).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Devarakonda et al in the claimed invention of Bozak et al in order to keep the overhead for affinity routing and load balancing small (See col. 4, lines 10-13).

l.   As per claim 14, Bozak et al teaches the claimed invention as described above. Furthermore, Bozak et al fails to teach wherein said affinity module considers factors to determine said affinity, wherein said factors comprises at least one of a list comprising: reserved dynamic account; and reserved memory space.

Devarakonda et al teaches wherein said factors comprises at least one of a list comprising a reserved memory space (See col. 7, lines 57-65).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Devarakonda et al in the claimed invention of Bozak et al in order to keep the overhead for affinity routing and load balancing small (See col. 4, lines 10-13).

4.   Claims 6, 16-17 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over

U.S. Patent Application No. 2005/0027864 to Bozak et al in view of U.S. Patent Application No.

2004/0193461 to Keohane et al.

a.   As per claims 6 and 23, Bozak et al teaches the claimed invention as described above.

However, Bozak et al fails to teach creating a new home directory for said user if a home

directory for said user does not exist in said computing resource; and assigning said new home

directory to a dynamic account associated with said computing resource.

Keohane et al teaches creating a new home directory for said user if a home directory for

said user does not exist in said computing resource; and assigning said new home directory to a

dynamic account associated with said computing resource (See page 3, paragraph [0043-0044]).

It would have been obvious to one with ordinary skill in the art at the time the invention

was made to incorporate the teaching of Keohane et al in view of Bozak et al in order for a user

to obtain status information on processes executing jobs within the grid (See page 3, paragraph

[0035]).

b.   As per claim 16, Bozak et al teaches the claimed invention as described above. However,

Bozak et al fails to teach wherein said manager further comprises: a dynamic account manager

for assigning a dynamic account associated with said selected computing resource to a home

directory of said user, wherein said dynamic account is reserved for said user.

Keohane et al teaches a dynamic account manager for assigning a dynamic account

associated with said selected computing resource to a home directory of said user, wherein said

dynamic account is reserved for said user (See page 3, paragraph [0044] and page 4, paragraph [00446-0047]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Keohane et al in view of Bozak et al in order for a user to obtain status information on processes executing jobs within the grid (See page 3, paragraph [0035]).

c.   As per claim 17, Bozak et al teaches the claimed invention as described above. However, Bozak et al fails to teach wherein said manager further comprises: a dynamic account manager for assigning a dynamic account associated with said selected computing resource to a home directory of said user, wherein said dynamic account is not reserved for said user.

Keohane et al teaches wherein said manager further comprises: a dynamic account manager for assigning a dynamic account associated with said selected computing resource to a home directory of said user, wherein said dynamic account is not reserved for said user (See page 4, paragraph [0046-0047]).

It would have been obvious to one with ordinary skill in the art at the time the invention was made to incorporate the teaching of Keohane et al in view of Bozak et al in order for a user to obtain status information on processes executing jobs within the grid (See page 3, paragraph [0035]).

Allowable Subject Matter

5.   Claims 7 and 24 are objected to as being dependent upon a rejected base claim, but would

be allowable if rewritten in independent form including all of the limitations of the base claim

and any intervening claims.

Conclusion

6.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Djenane M. Bayard whose telephone number is (571) 272-3878.

The examiner can normally be reached on Monday- Friday 5:30 AM- 3:00 PM..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

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like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Djenane Bayard

Patent Examiner

KENNETH R. COULTER
PRIMARY EXAMINER